Resource Module

The Resource Module contains three forms:

- Employees form (R-10);

- Maintenance Performance form (R-20); and

- Energy Consumption form (R-30).

Employees form (R-10)

The R-10 form collects data on the number of transit agency employees (person count) and their total work hours. Data are reported by mode for directly operated (DO) service only. The employee data are reported for operating labor (which is reported on the Operating Expenses form (F-30) by function) and for total capital labor.

Maintenance Performance form (R-20)

The R-20 form collects data on revenue vehicle system failures. Data are reported on one form for all DO **and** purchased transportation (PT) modes, except for demand response-taxi mode.

Energy Consumption form (R-30)

The R-30 form collects data on revenue vehicle fuel consumption. Data are reported on one form for all DO and PT rail modes and one form for all DO and PT non-rail modes, except for demand response-taxi mode.

Employees form (R-10)

| Home | e-File | Annual | Monthly Ridership | Safety & Security | Notes | Issues | Reports | Communications | Sys Admin | Help |

Form Name: Employees (R-10)   **Mode:**   **Service:** DO   **Close Form**

Line		a	b	c	d
		Employee Work Hours		**Actual Person Count**	
Labor Classifications		**Full Time Employees**	**Part Time Employees**	**Full Time Employees**	**Part Time Employees**
Operating Labor					
01	Vehicle operations (010)				
02	Vehicle maintenance (041)				
03	Non-vehicle maintenance (042)				
04	General administration (160)				
05	**Total Operating Labor**				
06	**Total Capital Labor**				
07	**Total Labor**				

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Overview

The Employees form (R-10) collects data on the number of transit agency employees (person count) and their total work hours by labor category.

Reporting Requirements and Thresholds

This form is required for directly operated (DO) service only. Complete one form for each DO mode.

What Has Changed from Prior Year

There are no changes to the R-10 form for the 2013 report year.

Approach

The data on this form pertain only to transit agency employees that work on DO modes. Two data items are reported — hours worked by employees and the number of employees (person count). The data items are reported by labor classification — operating and capital — and type of employee — full time and part time.

In order to complete the form it is necessary to understand:

- Who are employees of the transit agency;

- How should the employees be categorized; and

- How to count employee work hours and employees.

Employees

An employee is defined in NTD reporting as someone whose salary cost is reported in expense object class (501) labor on the F-30 form. Typically this means that the transit agency writes the payroll checks for the employee and provides an Internal Revenue Service Form W-2: Wage and Tax Statement for the employee.

Transit agencies may have two different types of employees — full time and part time employees. The NTD requires employee data to be categorized and reported by full time and part time employees according to the definitions used by your transit agency. Generally, your agency's human resources department uses these definitions to classify each employee as either full or part time.

Full time employees usually must work a minimum number of hours, such as at least 30 hours per week or 1,000 hours per year. Full time employees also usually receive a full benefits package.

Part time employees work less than the minimum number of hours required for full time employees, and usually receive no benefits or sometimes prorated benefits. Often, part time employees are paid at a lower pay rate than full time employees.

Full time employees working part of their time in a function or mode are **not** part time employees. For example, a full time mechanic may repair bus (MB) and demand response (DR) vehicles and should be considered as a full time employee on both the MB and DR R-10 forms.

Sometimes, transit agencies also classify employees as either permanent or temporary. These classifications should not be considered when reporting data for the R-10 form since both types of employees can be either full time or part time.

Persons employed through a temporary employment agency are not employees of the transit agency. The temporary employment agency, not the transit agency, writes payroll checks for the employees and provides the Internal Revenue Service Forms W-2: Wage and Tax Statement for the employees. Furthermore, their salary costs are not reported in expense object class (501) labor, but instead in expense object class (503) services on the F-30.

Exhibit 65 — Guidelines for Determining Whether an Individual is an Employee
The following individuals are employees under NTD reporting:
• An individual who has worked his / her scheduled assignment
• An individual on extended sick leave
• An individual temporarily disabled and assigned to another position
• An individual who has left the transit agency through separation or retirement and whose position has not been refilled but continues to receive a paycheck from the transit agency.
• An individual on a paid leave of absence
• An individual on an unpaid leave of absence of a prolonged duration, as long as he is retained on the benefits program and retains his job security rights
The following individuals are not employees under NTD reporting:
• An individual working temporarily on a service contract (expense object class (503) services)
• An individual employed by an entity, either private or public, that has a contract with the transit agency to perform specific services (e.g., management services, clerical)
• An individual under contract to another company but working on the transit agency's premises (e.g., temporary clerical services)

Employee Work Hours and Counts

Employee work hours and the actual person count of employees are collected for different time periods. The employee work hours cover all work performed during the report year. The actual person count of employees is determined at the end of the report year.

Employee work hours are the total hours worked by transit agency employees during the report year. Employees may have been hired during the year, or may have left before the end of the report year. Regardless of when employees begin or leave their jobs, the work hours performed during the reporting period are reported on this form. Employee work hours are determined from payroll records.

Overtime hours may be paid at a rate equal to 1.5 times the normal rate. However, the actual work hours should be reported. For example, an employee who works 10 hours of overtime should have 10 hours reported, not 15.

Work hours are not equivalent to and typically are less than total hours paid to transit employees. Work hours might be considered "duty hours" — hours during which employees are performing work for the transit agency. Work hours do not include hours related to fringe benefits, such as holiday time and sick leave.

A full time employee is paid approximately 2,080 total hours in a report year (40 hours per week x 52 weeks / year). Work hours may be 1,700 to 1,800 of the 2,080 hours with the balance of the hours being paid for fringe benefits such as holiday and sick leave.

It is unusual for full time employees to have average paid work hours that are equal to or greater than 2,080 hours. However, if a large amount of overtime was worked, this can cause total hours to be over 2,080.

The actual person count of employees is determined at the end of the report year. Normally, it is the number of employees who are working at the end of the fiscal year, but there may be unique situations such as employees on a paid leave of absence or employees who have left the agency through retirement or separation. See the guidelines above for who should or should not be counted as an employee.

Since employee work hours and the actual person count of employees are collected for different time periods, the relationships between the two statistics must be interpreted with care. In most cases, the average number of work hours per full time employee is less than 2,080 hours, and typically is in the range of 1,700 to 1,800 work hours.

Exhibit 66 — Hours Worked
Example: A transit agency has a full-time employee. This employee was paid for 2,080 hours of work; she spent 80 hours on vacation, 24 on sick leave, 40 on holidays, and 16 on personal leave. The remaining 1,920 was her time actually at work. How many hours should be reported?
Solution: Report hours actually worked: **1,920**.

However, high numbers of employees working at the end of the fiscal year relative to the average staffing levels over the fiscal year may suggest low hours worked per employee. Conversely, low numbers of employees at the end of the fiscal year may suggest high hours worked per employee.

Relationship of Employees form to Other NTD forms

Operating Expenses form (F-30) – The work hours reported by operating labor classification on the R-10 form should be consistent with the labor expenses reported by function on the F-30 form**. If work hours are reported in a specific operating labor classification (e.g., vehicle maintenance), then there should be corresponding labor expenses reported for the same function in object class (501) labor on the F-30 form**. Conversely, if labor expenses are reported in a specific function (e.g., non-vehicle maintenance) object class (501) labor on the F-30, then there should be corresponding work hours reported for the same operating labor classification on the R-10 form.

Detailed Instructions

Report employee work hours and counts by labor classification: operating labor and capital labor.

Labor Classification

Operating Labor

Operating labor are the personnel necessary to carry out the day-to-day requirements for providing transit service. Operating labor is reported by the four functions on the F-30 form — vehicle operations (010), vehicle maintenance (041), non-vehicle maintenance (042), and general administration (160).

The Uniform System of Accounts (USOA) has defined the work activities performed by employees in each function. The following exhibit summarizes the USOA work activities for operating labor by function.

Exhibit 67 — Employee Operating Labor Classifications — Chapter 6 of Uniform System of Accounts
Vehicle Operations Labor (line 01)
010 Vehicle Operations
010 — Transportation administration and support
011 — Transportation administration and support. Transportation managers, superintendents, port captains, terminal managers, supervisors and others engaged in administering transportation service at the system division and station levels; secretaries, stenographers and clerks supporting supervision of transportation activities; driver training instructors, students and service inspectors.
012 — Revenue vehicle movement control. System, division, and station managers and supervisors engaged in controlling dispatch, movement and return of revenue vehicles; secretaries and clerks supporting the supervision of vehicle movement control; road supervisors, dispatchers, stop and zone representatives, starters, timekeepers and employees engaged in furnishing supplies to vehicle operators; radio and telephone communication operators monitoring and controlling vehicle movement at communication centers.
021 — Scheduling of transportation operations. Traffic managers, superintendents, department heads and supervisors engaged in supervising the preparation of schedules for transportation operations; secretaries, stenographers and clerk-typists supporting the supervision of scheduling activities; schedule analysts, makers, checkers, statistical clerks; design, layout and reproduction people engaged in producing finished schedules.
151 — Ticketing and fare collection. Managers, treasurers, cashiers, department heads and supervisors engaged in supervising ticketing and fare collection activities; secretaries and clerk-typists supporting supervision; agents distributing, selling and collecting fares; printers and other machine operators producing tickets, tokens; people controlling and servicing sales outlets; vault pullers, sorters, money counters and cash clerks, security guards for vehicles and at collection and counting area; vehicle drivers transporting money to counting facilities and banks; accounting and control clerks auditing and monitoring fare sales, collection and counting activities; fare registration reconciliation clerks.
161 — System security. Security managers and supervisors engaged in supervising system-wide security; secretaries and clerks supporting security supervision; police officers, special agents, patrol staff, inspectors and others engaged in providing overall security.
030 — Revenue vehicle operation. Platform and travel pay of scheduled line, unscheduled line, charter and contract service revenue vehicle operators, conductors, collectors and other operating crew members working aboard transit vehicles; pay of ferryboat deck crews (e.g., captain, chief officers, mates, pilots).
Vehicle Maintenance Labor (line 02)
041 Vehicle Maintenance
041 — Maintenance administration — vehicles. Maintenance managers, port engineers, superintendents, supervisors and non-working lead workers engaged in directing and supervising maintenance and repairs to vehicles; secretaries and clerk-typists supporting the administration of maintenance activities; garage and shop clerks, timekeepers and other clerical people engaged in scheduling and recording vehicle maintenance activities, vehicle maintenance training instructors and students; engineers and other technicians engaged in vehicle maintenance activities.

Exhibit 67 — Employee Operating Labor Classifications — Chapter 6 of Uniform System of Accounts
051 — Servicing revenue vehicles. Service managers, supervisors and lead workers engaged in overseeing the preparation of revenue vehicles for service (excluding repair work); cleaners, washers, fuelers, oilers and hostlers; secretaries and clerks supporting vehicle servicing activities.
061 — Inspection and maintenance of revenue vehicles. Working supervisors, lead workers, inspectors, service personnel, apprentices, greasers, mechanics, welders, major component repair staff, electricians, bench hands, machinists, coil winders, sheet metal workers, sanders, painters, body workers, upholsterers, glass installers, carpenters, blacksmiths and others engaged in repair, maintenance and inspection activities for revenue vehicles.
062 — Accident repairs of revenue vehicles. All direct and indirect maintenance and administrative labor actually expended on or allocated to the repair of accident damage on revenue vehicles.
071 — Vandalism repairs of revenue vehicles. All direct and indirect maintenance and administrative labor actually expended on or allocated to the repair of vandalism damage on revenue vehicles.
081 — Servicing and fuel of service vehicles. Service managers, supervisors, and lead workers engaged in overseeing the preparation of service vehicles for operation (excluding repair work); cleaners, washers, fuelers, oilers and hostlers; secretaries and clerks supporting servicing activities for service vehicles.
091 — Inspection and maintenance of service vehicles. Working supervisors, lead workers, inspectors, service staff, greasers, mechanics, apprentices, welders, major component repair staff, electricians, bench hands, machinists, coil winders, sheet metal workers, sanders, painters, body workers, upholsters, glass installers, carpenters, blacksmiths, and others engaged in garage and shop repair and maintenance activities for service vehicles.

Non-Vehicle Maintenance Labor (line 03)

042 Non-Vehicle Maintenance

042 — Maintenance administration — facilites (non-vehicles). Maintenance managers, superintendents, supervisors and non-working lead workers engaged in directing and supervising maintenance and repairs to transit way and structures and to other buildings, grounds and equipment; secretaries and clerk typists supporting the administration of maintenance activities; clerks, timekeepers and other clerical people engaged in scheduling and recording maintenance activities; maintenance training instructors and students; engineers and other technicians engaged in transit way and structures and in other buildings, grounds and equipment maintenance activities.
101 — Maintenance of vehicle movement control systems. Working supervisors, lead workers, electronics technicians, radio and telephone repair staff and others engaged in the repair and maintenance of vehicle movement control equipment.
111 — Maintenance of fare collection and counting equipment. Working supervisors, lead workers, mechanics, cleaners, service staff, and others engaged in the repair and maintenance of fare collection and counting equipment.
121 — Maintenance of roadway and track. Working supervisors, lead workers, inspectors, repair crewmembers, and others engaged in the repair and maintenance of roadway and track (e.g., sanding, removing snow, sweeping, scraping).
122 — Maintenance of structure, tunnels and subways. Working supervisors, lead workers, inspectors, repair crew members, carpenters, custodians, painters, and others engaged in the repair and maintenance of transit way structures, tunnels, bridges and subways.
123 — Maintenance of passenger stations. Working supervisors, lead workers, inspectors, mechanics, service staff, carpenters, plumbers, electricians, custodians, painters, janitors, utility workers, groundskeepers, and others engaged in the repair and maintenance of passenger station buildings, grounds and equipment.
124 — Maintenance of operating station buildings, grounds and equipment. Working supervisors, lead workers, inspectors, mechanics, service staff, carpenters, plumbers, electricians, custodians, painters, janitors, utility workers, groundskeepers and others engaged in the repair and maintenance of operation station buildings, grounds and equipment.
125 — Maintenance of garage and shop buildings, grounds and equipment. Working supervisors, lead workers, inspectors, mechanics, service staff, carpenters, plumbers, electricians, custodians, painters, janitors, utility workers, groundskeepers, and others engaged in the repair and maintenance of garage and shop buildings, grounds and equipment.
126 — Maintenance of communication system. Working supervisors, lead workers, electricians, service staff, cleaners, electronics technicians, mechanics, utility workers, inspectors, and others engaged in the repair and maintenance of general communication equipment.
127 — Maintenance of general administration buildings, grounds and equipment. Working supervisors, lead workers, inspectors, mechanics, service staff, carpenters, plumbers, electricians, custodians, painters, janitors, utility workers, groundskeepers, and others engaged in the repair and maintenance of general administration buildings, grounds and equipment.
128 — Accident repairs of buildings, grounds and equipment. All direct and indirect maintenance and administrative labor actually expended on or allocated to the repair of accident damage on buildings, grounds and equipment.
131 — Vandalism repairs of buildings, grounds and equipment. All direct and indirect maintenance and administrative labor actually expended on or allocated to the repair of vandalism damage on buildings, grounds and equipment.
141 — Operation and maintenance of electric power facilities. Managers, supervisors, lead workers, operators, monitors, clerks and others directly engaged in the generation and distribution of electric power: working supervisors, lead workers, inspectors, mechanics, carpenters, plumbers, electricians, custodians, painters, janitors, utility workers, service staff, and others engaged in the repair and maintenance of electric power generation and distribution facilities.

General Administration Labor (line 04)

160 General Administration

Exhibit 67 — Employee Operating Labor Classifications — Chapter 6 of Uniform System of Accounts

165 — Injuries and damages. Managers, department heads and supervisors engaged in supervising injuries and damages activities; secretaries and clerks supporting administration and supervision; negotiators, lawyers, claims adjusters, investigators, special agents and photographers; statisticians and clerks accumulating and maintaining claims and accident data.

166 — Safety. Managers, directors, and department heads engaged in directing, conducting, and supervising a system safety program; secretaries and clerks supporting safety activities; safety instructors, statisticians, and others engaged in implementing system safety policies and procedures.

167 — Personnel administration. Managers, directors, supervisors, and department heads engaged in administering and supervising personnel activities; secretaries and clerk typists supporting personnel administration; recruiters, interviewers, testers, counselors, reviewers and examiners; employee welfare representatives, analysts, technicians and clerks; medical directors, nurses and first-aid assistants; job and performance evaluation analysts, orientation and training instructors, employment history record clerks, labor relations researchers, negotiators and grievance administrators.

168 — General legal services. Managers, directors and department heads engaged in administering and supervising general legal activities; secretaries and clerks supporting administration and supervision; attorneys, regulatory specialists, researchers, legal clerks and others providing general legal services to the transit agency.

169 — General insurance. Managers, supervisors, and department heads engaged in administering and supervising a general insurance program; secretaries and clerk typists supporting general insurance administration; claims adjusters, investigators, researchers, special agents, statisticians and clerks accumulating and maintaining claims and other general insurance information.

170 — Data processing. Managers, supervisors and department heads engaged in supervising data processing activities; secretaries and clerk-typists supporting data processing supervision; operators of computers, bookkeeping and accounting machines, unit record and other data processing equipment; data entry operators and verifiers; system analysts and programmers; data processing input and output control clerks; service staff and other repair people responsible for maintaining data processing equipment.

171 — Finance and accounting. Comptroller, treasurer, supervisors, chief accountants and department heads engaged in supervising finance and accounting activities; secretaries and clerk-typists supporting finance and accounting administration; accountants, bookkeepers and accounting clerks; budget analysts, cost accountants and internal auditors; receipts and labor distribution clerks, property and other fixed assets clerks.

172 — Purchasing and stores. Managers, directors, supervisors and department heads engaged in administering and supervising purchasing and stores activities; secretaries and clerk-typists supporting purchasing and stores administration; purchasing agents, buyers and specification analysts, storekeepers, stock clerks, shipping and receiving clerks, material handlers and deliverers; price, order and inventory control clerks.

173 — General engineering. Managers, chief engineers, supervisors, and department heads engaged in directing and supervising general engineering activities; secretaries and clerk typists supporting administration of general engineering; engineers, specification analysts, researchers and drafters.

174 — Real estate management. Managers, directors and department heads engaged in managing transit real estate; secretaries and clerical staff supporting administration of real estate activities.

175 — Office management and services. Office managers, supervisors and department heads engaged in supervising office management and services activities; secretaries and clerk-typists supporting administration of office management and services; main receptionists, switchboard operators, messengers, librarians, central file clerks, and mail room workers; printing shop operators and clerks; in-house newspaper writers and publishers; cafeteria and custodial employees.

176 — General management. Directors, general manager, assistant general manager, marine superintendent and operations manager (responsible for maintenance and transportation); administrative analysts, assistants and staff, special projects manager and staff; secretaries and other clerical staff supporting general management activities.

177 — Planning. Directors, managers, supervisors and department heads engaged in directing and supervising planning activities; secretaries and clerks supporting supervision activities; transit analysts and planners; design, layout and graphics specialists.

145 — Preliminary transit system development. All direct and indirect labor actually expended on or allocated to the preliminary development of a transit agency.

162 — Customer services. Managers, department heads and supervisors engaged in supervising customer service activities; charter service managers, sales personnel and staff workers; people operating route information booths and stands; telephone information operators and clerks; employees staffing a lost and found department; people engaged in designing, producing and distributing system maps and timetables.

163 — Promotion. Marketing and advertising managers, public information directors and other supervisors and department heads engaged in directing and supervising promotion activities; secretaries and clerks supporting supervision of promotion; design and layout artists, news writers and editors, mass media and public relations representatives; printers and machine operators producing promotional material.

164 — Market research. Directors, managers, supervisors and department heads engaged in directing and supervising transit market research activities; secretaries and clerks supporting supervision activities; customer and market researchers.

Capital Labor

Capital labor is the personnel involved in the purchase of equipment (e.g., buses, shelters) and construction of facilities (e.g., garages, guideway, stations). The work activities for capital labor are related to design and engineering, purchase, land acquisition / relocation, construction, rehabilitation, and management of capital grants and projects.

Employee Work Hours and Counts

You should report the number of employee work hours and actual person counts of employees, full time and part time.

Employee Work Hours

You should **report work hours for all the hours worked** by transit agency employees during the report year, **even if they are not employees at the end of the report year**.

Actual Person Count

You should report actual person counts based on approved and filled positions at the end of the report year.

You should allocate work hours and person counts among labor classifications and modes if an employee works for more than any one of the following:

- Function;
- Mode; and
- Type of service (TOS).

Your payroll records should enable you to allocate hours using a reasonable and consistent approach from year to year. You should report actual person counts to **one decimal place**. Employee counts are not required to add up to a whole number.

You should report only the hours and actual person counts of employees for directly operated (DO) modes. You should exclude the hours worked on behalf of purchased transportation (PT) agreements.

The example below describes how to report information for an employee working on more than one mode and TOS.

Exhibit 68 — Work Hours and Allocated Person Count

Example: A transit agency has a full time employee who performs vehicle maintenance on both directly operated (DO) and purchased transportation (PT) services. How should the employee and his work hours be reported?

Mode	Type of Service	Full Time Employee Work Hours
DR	DO	800
DR	PT	600
MB	PT	400
Total		**1,800**

Solution: Prorate the employee using the number of hours worked.

Mode	Type of Service	Full Time Employee Work Hours	Calculation of Employee	Full Time Employees
DR	DO	800 (line 02, column a)	800 / 1,800	0.5 (line 02, column c)
DR	PT	600 (not reported)	600 / 1,800	0.3 (not reported)
MB	PT	400 (not reported)	400 / 1,800	0.2 (not reported)
Total			**1,800**	**1.0**

Note: Mode DR/DO, the employee works 50 % of their time on this mode. DR/PT the employee works 30% of their time and MB-PT the employee works 20% off their time. Purchased transportation is not reported however, so in this case, the agency would only report half an employee (.5), on line 2, column c, and that person's hours worked for the reportable mode only, in this case 800 hours.

Line by Line Instructions for Employees form (R-10)

You should complete one form for each DO mode.

Form Level Help: You should click on the **Help** tab at the top of the screen for form level help.

Form Notes: A form note can be attached to any form. You should use the **Add Form Note** link for relevant information to a specific field, to the entire form or to multiple forms. You should click on the **Add Form Note** link at the top of the screen and enter your note on the **Notes** screen. You can review and / or edit a form note from the **Notes** tab. You should not use the **Form Notes** feature to answer issues generated from this form. From the **Issues** tab You should use the **Add Comments** link next to the specific issue.

Saving or Closing the Form: You should click on the **Save** button at the bottom of the screen to save the form. You should click on the **Close** button at the bottom of the screen to close the form without saving.

Labor Classifications

Operating Labor

Line 01: Vehicles Operations (010)

- Column a: Employee Work Hours for Full Time Employees. Enter the number of full time employee work hours for vehicle operations, including transportation administration and support, revenue vehicle operation, ticketing and fare collection, and system security. **These are all the hours worked by full time employees during the report year, even if they are not employees of the transit agency at the end of the report year**.

- Column b: Employee Work Hours for Part Time Employees. Enter the number of part time employee work hours for vehicle operations, including transportation administration and support, revenue vehicle operation, ticketing and fare collection, and system security. **These are all the hours worked by part time employees during the report year, even if they are not employees of the transit agency at the end of the report year.**

- Column c: Actual Person Count for Full Time Employees. Enter the actual person count of full time employees performing vehicle operations, including transportation administration and support, revenue vehicle operation, ticketing and fare collection, and system security. **These are all the full time personnel holding approved and filled positions at the end of the report year.**

- Column d: Actual Person Count for Part Time Employees. Enter the actual person count of part time employees performing vehicle operations, including transportation administration and support, revenue vehicle operation, ticketing and fare collection, and system security. **These are all the part time personnel holding approved and filled positions at the end of the report year.**

Line 02: Vehicle Maintenance (041)

- Column a: Employee Work Hours for Full Time Employees. Enter the number of full time employee work hours directing, supervising and / or performing inspection and vehicle maintenance activities, repairs, and servicing (cleaning, sweeping, washing, fueling, oiling) of transit vehicles (revenue vehicles and service vehicles). **These are all the hours worked by full time employees during the report year, even if they are not employees of the transit agency at the end of the report year.**

- Column b: Employee Work Hours for Part Time Employees. Enter the number of part time employee work hours directing, supervising and / or performing inspection and vehicle maintenance activities, repairs and servicing (cleaning, sweeping, washing, fueling, oiling) of transit vehicles (revenue vehicles and service vehicles). **These are all the hours worked by part time employees during the report year, even if they are not employees of the transit agency at the end of the report year.**

- Column c: Actual Person Count for Full Time Employees. Enter the actual person count of full time employees directing, supervising and / or performing inspection and vehicle maintenance activities, repairs and servicing (cleaning, sweeping, washing, fueling, oiling) of transit vehicles (revenue vehicles and service vehicles). **These are all the full time personnel holding approved and filled positions at the end of the report year.**

- Column d: Actual Person Count for Part Time Employees. Enter the actual person count of part time employees directing, supervising and / or performing inspection and vehicle maintenance activities, repairs and servicing (cleaning, sweeping, washing, fueling, oiling) of transit vehicles (revenue vehicles and service vehicles). **These are all the part time personnel holding approved and filled positions at the end of the report year.**

Line 03: Non-Vehicle Maintenance (042)

- Column a: Employee Work Hours for Full Time Employees. Enter the number of full time employee work hours directing, supervising and / or performing non-vehicle maintenance of buildings, grounds, roadways and track, fare

collection and counting equipment, and revenue vehicle movement control systems. **These are all the hours worked by full time employees during the report year, even if they are not employees of the transit agency at the end of the report year.**

- Column b: Employee Work Hours for Part Time Employees. Enter the number of part time employee work hours directing, supervising and / or performing non-vehicle maintenance of buildings, grounds, roadways and track, fare collection and counting equipment, and revenue vehicle movement control systems. **These are all the hours worked by part time employees during the report year, even if they are not employees of the transit agency at the end of the report year.**

- Column c: Actual Person Count for Full Time Employees. Enter the actual person count of full time employees directing, supervising and / or performing non-vehicle maintenance of buildings, grounds, roadways and track, fare collection and counting equipment, and revenue vehicle movement control systems. **These are all the full time personnel holding approved and filled positions at the end of the report year.**

- Column d: Actual Person Count for Part Time Employees. Enter the actual person count of part time employees directing, supervising and / or performing non-vehicle maintenance of buildings, grounds, roadways and track, fare collection and counting equipment, and revenue vehicle movement control systems. **These are all the part time personnel holding approved and filled positions at the end of the report year.**

Line 04: General Administration (160)

- Column a: Employee Work Hours for Full Time Employees. Enter the number of full time employee work hours performing executive, professional, supervisory and clerical general administrative duties including planning, legal services, data processing, finance and accounting, safety, insurance, general engineering, real estate management, and customer service, promotion and market research. **These are all the hours worked by full time employees during the report year, even if they are not employees of the transit agency at the end of the report year.**

- Column b: Employee Work Hours for Part Time Employees. Enter the number of part time employee work hours performing executive, professional, supervisory and clerical general administrative duties including planning, legal services, data processing, finance and accounting, safety, insurance, general engineering, real estate management, and customer service, promotion and market research. **These are all the hours worked by part time employees during the report year, even if they are employees of the transit agency at the end of the report year.**

- Column c: Actual Person Count for Full Time Employees. Enter the actual person count of full time employees performing executive, professional, supervisory and clerical general administrative duties including planning, legal services, data processing, finance and accounting, safety, insurance, general engineering, real estate management, and customer service, promotion and market research. **These are all the full time personnel holding approved and filled positions at the end of the report year.**

- Column d: Actual Person Count for Part Time Employees. Enter the actual person count of part time employees performing executive, professional, supervisory and clerical general administrative duties including planning, legal services, data processing, finance and accounting, safety, insurance, general engineering, real estate management, and customer service, promotion and market research. **These are all the part time personnel holding approved and filled positions at the end of the report year.**

Line 05: Total Operating Labor

- Column a: Employee Work Hours for Full Time Employees. This is an **auto-calculated** field and cannot be edited, review for accuracy. The number of full time employee work hours for vehicle operations, vehicle maintenance, non-vehicle maintenance and general administration equal to the sum of lines 01 through 04.

- Column b: Employee Work Hours for Part Time Employees. This is an **auto-calculated** field and cannot be edited, review for accuracy. The number of part time employees, employee work hours for vehicle operations, vehicle maintenance, non-vehicle maintenance and general administration equal to the sum of lines 01 through 04.

- Column c: Actual Person Count for Full Time Employees. This is an **auto-calculated** field and cannot be edited, review for accuracy. The actual person count of full time employees performing vehicle operations, vehicle maintenance, non-vehicle maintenance and general administration equal to the sum of lines 01 through 04.

- Column d: Actual Person Count for Part Time Employees. This is an **auto-calculated** field and cannot be edited, review for accuracy. The actual person count of part time employees performing vehicle operations, vehicle maintenance, non-vehicle maintenance and general administration equal to the sum of lines 01 through 04.

Line 06: Total Capital Labor

- Column a: Employee Work Hours for Full Time Employees. Enter the number of full time employee work hours involved in purchasing equipment (e.g., buses, shelters) and constructing facilities (e.g., garages, guideway, stations). These are all the hours worked by full time employees during the report year, even if they are not employees of the transit agency at the end of the report year.

- Column b: Employee Work Hours for Part Time Employees. Enter the number of part time employee work hours involved in purchasing equipment (e.g., buses, shelters) and constructing facilities (e.g., garages, guideway, stations). These are all the hours worked by part time employees during the report year, even if they are not employees of the transit agency at the end of the report year.

- Column c: Actual Person Count for Full Time Employees. Enter the actual person count of full time employees involved in purchasing equipment (e.g., buses, shelters) and constructing facilities (e.g., garages, guideway, stations). These are all the full time personnel holding approved and filled positions at the end of the report year.

- Column d: Actual Person Count for Part Time Employees. Enter the actual person count of part time employees involved in purchasing equipment (e.g., buses, shelters) and constructing facilities (e.g., garages, guideway, stations). These are all the part time personnel holding approved and filled positions at the end of the report year.

Line 07: Total Labor

- Column a: Employee Work Hours for Full Time Employees. This is an **auto-calculated** field and cannot be edited, review for accuracy The number of full time employee work hours for operating and capital labor equal to the sum of lines 05 and 06.

- Column b: Employee Work Hours for Part Time Employees. This is an **auto-calculated** field and cannot be edited, review for accuracy The number of part time employee work hours for operating and capital labor equal to the sum of lines 05 and 06.

- Column c: Actual Person Count for Full Time Employees. This is an **auto-calculated** field and cannot be edited, review for accuracy The actual person count of full time employees for operating and capital labor equal to the sum of lines 05 and 06.

- Column d: Actual Person Count for Part Time Employees. This is an **auto-calculated** field and cannot be edited, review for accuracy The actual person count of part time employees for operating and capital labor equal to the sum of lines 05 and 06.

Maintenance Performance form (R-20)

Form Name: Maintenance Performance (R-20)

Line		a	b	c	d	e	f	g
Mode/Service		CB / DO	CB / PT	DR / PT	LR / DO	MB / DO	MB / PT	VP / PT
Revenue Vehicle System Failures		Number of Failures	Number of Failures	Number of Failures	Number of Failures	Number of Failures	Number of Failures	Number of Failures
01	Major mechanical system failures	450	104	453	8	3,104	717	19
02	Other mechanical system failures	150	38	927	26	1,389	360	69
03	**Total Revenue Vehicle System Failures**	600	142	1,380	34	4,493	1,077	88

Close   Print

2013 Urban Reporting Manual

Overview

The Maintenance Performance form (R-20) collects data on revenue vehicle system failures.

Reporting Requirements and Thresholds

This form is required for all directly operated (DO) and purchased transportation (PT) modes except demand response taxi mode (DT/PT). You should complete one form for all modes and types of service.

What Has Changed from Prior Year

There are no changes to the R-20 form for the 2013 report year.

Approach

You should report only failure data for revenue vehicles. Revenue vehicle system failures are mechanical problems that affect a vehicle as follows:

- The specific vehicle does not complete its scheduled revenue trip; or
- The specific vehicle does not start its next scheduled revenue trip.

The definition of revenue vehicle system failures applies to the performance of a specific vehicle (e.g., bus equipment number 5009). A failure is counted when the specific vehicle (e.g., 5009) fails to complete its scheduled revenue trip or start its next scheduled revenue trip. This is true even when another vehicle (e.g., vehicle number 4004) is substituted and no revenue service is lost.

The failures may occur in revenue service including layover / recovery time, or during deadhead operations. See the Service form (S-10) section of this manual for a detailed discussion of revenue service, layover/recovery time, and deadhead.

The revenue vehicle system failures are reported in two categories:

- Major mechanical system failures are those that limit actual vehicle movement or are safety issues; and
- Other mechanical system failures.

Detailed Instructions

You should report data by mode and type of service.

Failures are classified as either a major or other failure of a part of the revenue vehicle's mechanical systems.

You should report all failures that affect the completion of a scheduled revenue trip or the start of the next scheduled revenue trip, including failures during deadheading and layover.

Major Mechanical System Failures

These are failures of a mechanical element of the revenue vehicle that prevents the vehicle from completing a scheduled revenue trip or from starting the next scheduled revenue trip because actual movement is limited or because of safety concerns. Examples of major bus failures include breakdowns of brakes, doors, engine cooling system, steering and front axle, rear axle and suspension.   A failure need not be expensive or difficult to repair to be classified as major- for example, a flat tire would be a major failure if it prevented the bus from completing its scheduled trip.

A number of factors affect the number of major mechanical system failures incurred by a transit agency including local operating conditions, types of vehicles operated, and effectiveness of the maintenance program. However, it is expected that the same types of major mechanical failures will be reported by different agencies. The differences among agencies may be in the numbers reported, not the types of major mechanical failures.

Other Mechanical System Failures

These are failures of some other mechanical element of the revenue vehicle that, **because of local agency policy**, prevents the revenue vehicle from completing a scheduled revenue trip or from starting the next scheduled revenue trip **even though the vehicle is physically able to continue** in revenue service. Examples of other bus failures include breakdowns of fare boxes, wheelchair lifts, heating, and ventilation and air conditioning (HVAC) systems,

Since other mechanical system failures are based on local policies, there will be variation in the types and therefore, the numbers reported by different transit agencies. For example, some agencies in the southern part of the country may continue to operate a bus with a heating system breakdown while agencies in the northern part of the country would replace the bus immediately.

The following examples illustrate how revenue vehicle system failures are reported.

Exhibit 69 — Revenue Vehicle System Failure Reporting

Example 1: The air conditioning on one of Hamlet Transit Agency's buses (MB/DO) fails while carrying passengers in revenue service. The driver determines that he is unable to repair the problem and calls for a backup because it is a hot day.

Solution: You should report as other mechanical system failure (line 02, MB). Air conditioning is not considered a major system, because the bus could physically continue in revenue service without working air conditioning.

Example 2: During layover, one of Hamlet Transit Agency's buses (MB/DO) experiences an engine cooling system failure. The vehicle is towed to the garage. A backup bus is dispached immediately and the next trip departs on time.

Solution: You should report as a major mechanical systems failure because the bus could not physically operate its next scheduled trip (line 01, MB).

Example 3: The brakes stick on one of Hamlet Transit Agency's buses (MB/DO). The driver radios for help from the mobile repair unit; the unit adjusts the brakes during the scheduled layover for the bus in time for the bus to start its next scheduled trip.

Solution: You do not report because the bus started its next scheduled trip.

Example 4: The front axle breaks on one of Hamlet Transit Agency's buses (MB/DO) on its scheduled pullout from the garage to the beginning of the bus route. The bus is towed to the garage and a replacement vehicle is sent.

Solution: You should report as a major mechanical systems failure because the bus could not start its next scheduled trip (line 01, MB).

Example 5: While deadheading back to the dispatching point at the end of the day, an electrical system problem activates the wheelchair lift on one of Hamlet Transit Agency's vans (DR/DO). The lift gets stuck in the extended position and the van has to be towed to the garage.

Solution: You should not report since the van completed all of its scheduled trips for the day.

Example 6: A substation that provides power to Hamlet Transit Agency's light rail (LR/DO) experiences a temporary failure. Rail service is delayed for ten minutes. Passengers stay on-board and service resumes.

Solution: You should do not report this incident. There is no mechanical failure of a light rail passenger car.

Example 7: A vehicle's mirror breaks, making it unsafe to operate. Another vehicle is swapped in.

Solution: Since the vehicle was unsafe to operate, this is a major mechanical failure.

Example 8: On a 6-car heavy rail (HR/DO) train, one of the doors fails, making one car unable to carry passengers, while the other 5 are still operable. The train is not removed from service.

Solution: Since one car is unable to provide service, this is a major mechanical failure.

Exhibit 70 — Revenue Vehicle System Failure Reporting
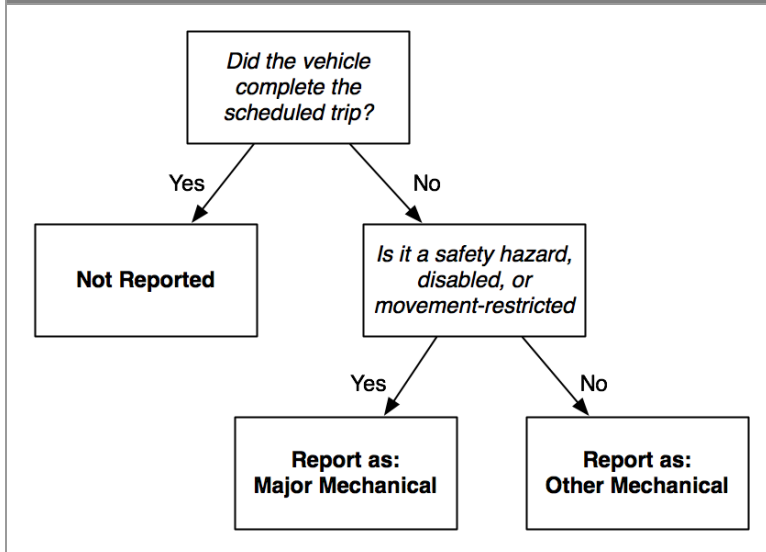
Line by Line Instructions for Maintenance Performance form (R-20)

You should complete one form for rail modes and non-rail modes by mode and type of service.

Form Level Help: You should click on the **Help** tab at the top of the screen for form level help.

Form Notes: A form note can be attached to any form. You should use the **Add Form Note** link for relevant information to a specific field, to the entire form or to multiple forms. You should click on the **Add Form Note** link at the top of the screen and enter your note on the **Notes** screen. You can review and / or edit a form note from the **Notes** tab. You should not use the Form Notes feature to answer issues generated from this form. From the **Issues** tab You should use the **Add Comments** link next to the specific issue.

Saving or Closing the Form: You should click on the **Save** button at the bottom of the screen to save the form. You should click on the **Close** button at the bottom of the screen to close the form without saving.

Revenue Vehicle System Failures

Line 01: Major Mechanical System Failures. By mode.

- Enter the number of failures of mechanical components of major systems that prevent the specific revenue vehicle from completing a scheduled revenue trip or from starting the next scheduled revenue trip because actual movement is limited or because of safety concerns.

Line 02: Other Mechanical System Failures. By mode.

- Enter the number of failures of mechanical components of major systems that, because of local agency policy, prevent the specific revenue vehicle from completing a scheduled revenue trip or from starting the next scheduled revenue trip even though the vehicle is physically able to continue in revenue service.

Line 03: Total Revenue Vehicle System Failures.

- This is an **auto-calculated** field and cannot be edited, review for accuracy. By mode, the total number of revenue vehicle system failures equal to the sum of lines 01 and 02.

Energy Consumption form (R-30)

| Home | e-File | Annual | Monthly Ridership | Safety & Security | Notes | Issues | Reports | Communications | Sys Admin | Help |

Form Name: Energy Consumption Rail (R-30)

Line	a
	Total Units Consumed per Mode
Energy Type	**LR / DO**
02 Kilowatt hours of propulsion power (EP)	6,409,512 ×
03 Gallons of diesel fuel (DF)	
04 Gallons of bio-diesel (BD)	
06 Gallons of liquefied petroleum gas (LPG)(LP)	
07 Gallons of liquefied natural gas (LNG)(LN)	
14 Gallons of other fuel (OR)	

[Close]   [Print]

| Home | e-File | Annual | Monthly Ridership | Safety & Security | Notes | Issues | Reports | Communications | Sys Admin | Help |

Form Name: Energy Consumption Non-Rail (R-30)   **Add Form Note**   **Close Form**

Line	a	b	c
	Total Units Consumed per Mode	**Total Units Consumed per Mode**	**Total Units Consumed per Mode**
Energy Type	**DR / PT**	**MB / DO**	**RB / DO**
01 Kilowatt hours to charge batteries (EB)			
02 Kilowatt hours of propulsion power (EP)			
3 Gallons of diesel fuel (DF)			
04 Gallons of bio-diesel (BD)			
05 Gallons of gasoline (GA)			
06 Gallons of liquefied petroleum gas (LPG)(LP)			
07 Gallons of liquefied natural gas (LNG)(LN)			
08 Gallons of methanol (MT)			
09 Gallons of ethanol (ET)			
10 Gallons of compressed natural gas (CNG)(CN)			
11 Gallons of bunker fuel (BF)			
12 Gallons of kerosene (KE)			
13 Hydrogen			
14 Gallons of other fuel (OR)			

[Save]   [Close]   [Print]

Overview

The Energy Consumption form (R-30) collects data on the fuels consumed by revenue vehicles. These are the fuels used to propel the revenue vehicle.

Reporting Requirements and Thresholds

This form is required for all [directly operated](#) (DO) and [purchased transportation](#) (PT) modes except demand response taxi (DT). You should complete one form for all modes and types of service.

What Has Changed from Prior Year

Fuel type Grain Additive (GR) has been eliminated and hydrogen (HY) has been added.

Approach

Only the fuel used to propel revenue vehicles is reported. Lubricants are not reported.

Relationship of Energy Consumption to Other NTD Forms

This form has a key reporting relationship with the **Revenue Vehicle Inventory form (A-30).** The fuel types for which fuel consumption is reported on the R-30 form should be consistent — one-to-one matching — with the fuel types reported on the A-30 form. The only exceptions to this reporting relationship are when the vehicles have been added or retired from the vehicle inventory during the report year since the R-30 form shows fuel consumption for the entire report year while the A-30 form shows the vehicle inventory on the last day of the report year.

Detailed Instructions

You are required to report energy consumption in kilowatt-hours, gallons, or gallon equivalents.

There are two versions of the form that you may complete, based on the modes operated by your agency:

- All rail modes; and
- All non-rail modes.

The rail form has fewer selections of fuel types than the non-rail form.

Rail Modes

The reporting for rail modes is done by energy type.

Energy Type

You should report the following types of energy consumed for rail modes:

- Kilowatt hours of propulsion power (EP);
- Gallons of diesel fuel (DF);
- Gallons of bio-diesel (BD);
- Gallons of liquefied petroleum gas (LPG) (LP);
- Gallons of liquefied natural gas (LNG) (LN); and
- Gallons of other fuel (OR).

If none of the energy choices fits, you should select gallons of other fuel (OR). Internet reporting will display a box for you to describe the other fuel (OR) consumed.

You should report fuel mixtures by the amount of fuel consumed in each category.

Non-Rail Modes

The reporting for non-rail modes is done by energy types, but also may involve considerations related to hybrid vehicles and CNG conversion.

Energy Type

You should report the following types of energy consumed for non-rail modes:

- Kilowatt hours of propulsion power (EP);
- Kilowatt hours to charge batteries (EB);
- Gallons of diesel fuel (DF);
- Gallons of bio-diesel (BD);
- Gallons of gasoline (GA);
- Gallons of liquefied petroleum gas (LPG) (LP);
- Gallons of liquefied natural gas (LNG) (LN);
- Gallons of methanol (MT);
- Gallons of ethanol (ET);
- Gallons of compressed natural gas (CNG) (CN);
- Gallons of bunker fuel (low grade of diesel fuel often used in ferryboat operations) (BF);
- Gallons of kerosene (KE);
- Gallons of other fuel (OR); and
- Gallons of hydrogen (HY).

If none of the energy choices fits, you should select gallons of other fuel (OR). Internet reporting will display a box for you to describe the other fuel (OR) consumed.

You should report fuel mixtures by the amount of fuel consumed in each category.

Hybrid Vehicles

Vehicles that consume liquid fuel, but supplement the combustion engine with an electric motor which is charged by the motion of the vehicle, are called hybrids. Only the primary fuel source (typically gasoline or diesel) should be reported.

Dual Fuel

A vehicle that uses more than one source of fuel is called dual fuel. This includes plug-in hybrids that consume both liquid fuel and electricity from an outlet. It does not include hybrids that charge their batteries using systems on board the vehicle, without plugging into an electric outlet.

CNG/Hydrogen Conversion

You should report compressed natural gas (CNG) in gallon equivalents of either gasoline or diesel fuel. **If possible, you should contact the supplier for the correct conversion factors**. If you cannot obtain the conversion factor from the supplier, you should use the conversion factors in the exhibit below. The actual form in Internet reporting provides a link to the **Conversion Table**.

In order to apply the factors, you should determine what type of fuel the revenue vehicle would have likely used if it were not powered by CNG, generally with diesel or gasoline. Several examples of applying this reporting guideline are provided in Exhibit 72 below.

1 kilogram of hydrogen is equivalent to 1 gallon of gasoline; thus, hydrogen may be reported in kilograms or gasoline gallon equivalents (gge).

Exhibit 71 — Compressed Natural Gas Conversion Factors
1 Therm = 100,000 BTUs
Gallon equivalents of diesel (#2 grade) = Number of BTUs / 138,000
Gallon equivalents of gasoline = Number of BTUs / 114,000
Gallon equivalent of gasoline = 5.66 pounds
Gallon equivalent of diesel (#2 grade) = 5.42 pounds

Exhibit 72 — Compressed Natural Gas Conversion
Example 1: A transit agency has one small bus for demand response service that uses CNG fuel. It buys 5,000 therms of CNG.
Solution: The transit agency decides that the most likely fuel if not CNG would have been DF.
5,000 therms × 100,000 BTU / 138,000 = **3,623 equivalent gallons of diesel fuel (DF)**
Example 2: A transit agency has one eight-passenger van for demand response (DR) service that uses CNG fuel. It buys 4,500 therms of CNG.
Solution: The transit agency decides that the most likely fuel if not CNG would have been gasoline (GA).
4,500 therms × 100,000 BTU / 114,000 = **3,947 equivalent gallons of gasoline (GA)**
Example 3: A transit agency has one eight-passenger van for demand response (DR) service that uses CNG fuel. It buys 4,000 pounds of CNG.
Solution: The transit agency decides that the most likely fuel if not CNG would have been gasoline (GA).
600 pounds × 5.66 gallons per pound = **3,396 equivalent gallons of gasoline (GA)**

Line by Line Instructions Energy Consumption form (R-30)

You should complete one form for rail modes and one form for non-rail modes by mode and type of service. The form does not collect fuel consumption data for taxicab services (DT/PT). **Form Level Help**: You should click on the **Help** tab at the top of the screen for form level help.

Form Notes: A form note can be attached to any form. You should use the **Add Form Note** link for relevant information to a specific field, to the entire form or to multiple forms. You should click on the **Add Form Note** link at the top of the screen and enter your note on the **Notes** screen. You can review and / or edit a form note from the **Notes** tab. You should not use the Form Notes feature to answer issues generated from this form. From the **Issues** tab you should use the **Add Comments** link next to the specific issue.

Saving or Closing the Form: You should click on the **Save** button at the bottom of the screen to save the form. You should click on the **Close** button at the bottom of the screen to close the form without saving.

Energy Type – By Mode for all lines

Line 01: Kilowatt Hours to Charge Batteries (EB).

- Enter the number of kilowatt hours to charge EB for electric revenue vehicles for all non-rail modes.

Line 02: Kilowatt Hours of Propulsion Power (EP).

- Enter the number of kilowatt hours of EP consumed by the revenue vehicles for all rail and trolleybus (TB) modes and battery-powered vehicles.

Line 03: Gallons of Diesel Fuel (DF).

- Enter the number of gallons of DF consumed by the revenue vehicles for all rail and non-rail modes.

Line 04: Gallons of Bio-Diesel (BD).

- Enter the number of gallons of BD consumed by the revenue vehicles all for non-rail modes.

Line 05: Gallons of Gasoline (GA).

- Enter the number of gallons of GA consumed by the revenue vehicles for all non-rail modes.

Line 06: Gallons of Liquefied Petroleum Gas (LPG) (LP).

- Enter the number of gallons of LPG consumed by the revenue vehicles for all rail and non-rail modes.

Line 07: Gallons of Liquefied Natural Gas (LNG) (LN).

- Enter the number of gallons of LNG consumed by the revenue vehicles for all rail and non-rail modes.

Line 08: Gallons of Methanol (MT).

- Enter the number of gallons of MT consumed by the revenue vehicles for all non-rail modes.

Line 09: Gallons of Ethanol (ET).

- Enter the number of gallons of ET consumed by the revenue vehicles for all non-rail modes.

Line 10: Gallons of Compressed Natural Gas (CNG) (CN).

- Enter the number of equivalent gallons (gasoline or diesel fuel) of CNG consumed by the revenue vehicles for all non-rail modes. If possible, contact the supplier for the correct conversion factors. If you cannot obtain the conversion factor from the supplier, click the **text** link to view a CNG conversion table for equivalent gallons.

Line 11: Gallons of Bunker Fuel (BF).

- Enter the number of gallons of BF (low grade of diesel fuel often used in ferryboat operations) consumed by the revenue vehicles for all non-rail modes.

Line 12: Gallons of Kerosene (KE).

- Enter the number of gallons of KE consumed by the revenue vehicles for all non-rail modes.

Line 13: Gallons of Hydrogen (HY).

- Enter the number of gallons of HY consumed by the revenue vehicles for all non-rail modes.

Line 14: Gallons of Other Fuel (OR).

- Enter the number of gallons of any OR fuel consumed by the revenue vehicles for all rail and non-rail modes. Gallons of OR fuel – If none of the energy choices fit select gallons of OR fuel. Internet reporting will display a box for you to describe the OR fuel consumed.